

Submission
No 37

INQUIRY INTO ASPECTS OF AGRICULTURE IN NSW

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Submission to
the Standing Committee on State Development
regarding the
Agricultural Industry in NSW

by

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a) The contribution of agriculture and agricultural-based products to the NSW economy.

1. According to the Grains Research and Development Corporation Australia's agricultural production has continued to grow during the past 50 years. *"One thing we do know is that productivity growth in Australian agriculture has been strong relative to other sectors of the Australian economy (up to four times higher), and also when compared to other countries' agricultural sector."* (GRDC Managing Director Peter Reading said in the May-June Groundcover).

b) Impediments to sustaining appropriate levels of productive capacity and growth in the agricultural industry.

1. Currently all the States in Australia are being heavily lobbied by the GM industry to lift the moratoria in 2008. The proposals by the GM industry are suggested as the only way forward to lift Australia's grain productivity. These proposals are not based on any independent scientific research, rather they are based on unsubstantiated claims. The economic modelling by the Network of Concerned Farmers, together with that of Twynam's Pastoral Company, demonstrate a reduction in profitability for grain growers if we adopt GM canola in 2008. The royalty cost of \$37/ha (Canada) plus the estimated cost of identity preservation \$52/ha (ABARE 2002-10% of grain value \$350) suggest that the GM crop would, for example, have to yield at least 30% more than conventional varieties to give growers a 10% profit. If the NSW Government, along with other States give the Biotech Companies a favourable decision and lift the moratorium, these patented crops will be more expensive to grow than conventional food crops. Money will flow out of our rural communities to patent holders which to date are not Australian owned. Breeders will not be encouraged to develop new varieties with quality traits, the first expense being to pay royalties before any seed development is even commenced and biodiversity will decrease. Until there is a **demonstrated increase** in yield, we can only see GM canola costing an extra \$91/h which will have a serious impact on sustainability.
2. Growers are concerned that the adoption of RR crops which are resistant to the herbicide glyphosate will mean a fast tracking of resistance to this very important herbicide in our no till farming systems. There is nothing, so far, under development to replace glyphosate.
3. Australia has a 13% share of the world's export market and we must compete with countries producing far greater quantities which can guarantee supply. We can never guarantee supply due to our periodic droughts which means carefully nurtured markets can be lost overnight to competitors. The only way to regain and retain these markets is by providing a product which our competitors are unable to supply. No country in the world has a preference for GM food or is willing to pay a premium.

- c) Initiatives to address impediments to sustaining appropriate levels of productive capacity and growth in the agricultural industry, having regard to the NSW State Plan priority areas of 'Growing Prosperity Across NSW' and 'Environment for Living.'
1. Continue and increase funding for independent seed breeding. Although privatisation may appear attractive, it will be in the long term, to the detriment of both growers and consumers. Private companies will develop seed which is the most financially lucrative for them, the seed will be patented, choice for farmers will disappear and so will choice for consumers.
 2. Ensure the GRDC follows through with its new five year plan. Amongst the aims is to "*ensure grains R & D is market driven*". (Groundcover September-October 2007.) Yet the GRDC is currently supporting the introduction of GM canola and GM wheat, neither of which is market driven.
 3. Ensure the introduction of RR crops does not put undue pressure on the use of glyphosate in our farming systems.

SUBMISSION
To
The GM Crop Moratorium Review Panel

by

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13th August 2007

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Summary

The NCF shows it is clear that there is no net industry (farming community) benefit in lifting the moratorium at present. If the moratorium was lifted there would be substantial unrecoverable costs to farmers and consumers; and an irreversible change without certainty of benefits to the grains industry.

There are three main issues regarding the introduction of GM canola and/or other grains if the Moratoria are lifted in 2008

1. The impacts on our international and domestic markets.

Australia has two main considerations which influence our markets.

Firstly, the inability to maintain consistent supply due droughts, resulting in loss of established markets. This loss means carefully nurtured markets can be easily filled by our competitors. Secondly, our small export package in comparison to our competitors.

It is essential therefore, that Australia has a commodity which is keenly sought, and which our competitors can no longer supply. Our current non-GM status with regard to canola permits Australia to maintain its small share of the world's market (13%).

Not one canola buying country in the world has expressed a preference for GM canola, either as meal, oil or seed, nor are there any records of premiums for GM canola.

2 The financial impacts on canola growers.

It is absolutely essential that growers are given costs and performance of GM crops in order to make sound economic decisions. No other business is expected to take on any commodity without this most basic and essential information.

3 Co-existence plans.

The protocols for co-existence must be well understood and agreed to by all stakeholders. These protocols must include a pathway to market for non-GM as well as GM grains.

NSW Crop Moratorium Review

The Network of Concerned Farmers supports the extension of the Crop Moratorium for all food crops for another 3 years. It is clear that the past three years of Moratoria in all States has been a lost opportunity to examine and answer many questions which growers and marketers still have. Currently we are facing an impasse with the Biotech Companies insisting on a pathway to market for their GM canola. Growers are resisting this move due to lack of agronomic information and concerns about market loss. Other concerns are liabilities, segregation issues and a lack of transparency by the Biotech Companies.

Another 3 years of moratoria is only sensible if there are clear objectives with time frames incorporated.

If it is decided to drop the moratorium in all the States it must be well recognised that without segregation protocols and suitable tests, the ability for farmers to remain GM free will be virtually impossible and, like Canada, we will be a GM canola growing country within 3 years.

As canola growers, we identify and list the following issues as problems and offer solutions.

CANOLA

1. a) PROBLEM: - No agronomic data

- After 3 years of moratorium, growers still do not have any agronomic data on which to base an informed decision.
Peter Reading, Managing Director GRDC. “...it is not enough for research to be done, it has to be seen to be done; and the results available for all to see in a financially, socially and environmentally healthy industry”. (Groundcover May-June 2007).
- Claims of higher yields and drought tolerance are unsubstantiated and not credible given that GM canola is only genetically engineered to be herbicide tolerant and or a hybrid. Both these two traits are available with conventional and TT canola.
- There are a number of agronomists, scientists and farmers who have concerns about the impact RR canola will have on our farming systems in general. There is concern that glyphosate resistance will become more widespread leading to more concentrated roundup and/or less environmentally friendly herbicides.
- The claims that GM canola will use less chemicals is not proven. There are no agronomic details detailing active ingredient in the chemical use. No consideration is given to the replacement of roundup as a pre-sowing ‘knockdown’.

- Statistics do not support the statement that GM canola yields more. Canadian farmers have been growing GM canola since 1996. In 2002 60% of the canola crop was GM and 40% non-GM (Ref Canadian Wheat Board). In 2004 PG Economics calculated that 68% of the canola crop was genetically modified. The following *Tables 1 & 2* show the comparison between acres sown and tonnes produced.

Canadian and Australian Canola Production Comparison

Table 1 – Canada Canola Production (unsegregated GM & non GM)

Year	Acres (000)	Tonnes (000)	Yield t/acre
1996	8,527.4	5,062.3	0.607
1997	12,032.8	6,393.1	0.526
1998	13,414.8	7,643.3	0.460
1999	13,749.7	8,798.3	0.566
2000	12,007.4	7,205.3	0.607
2001	9,353.4	5,017.1	0.526
2002	8,464.8	4,407.1	0.526
2003	11,587.2	6,771.2	0.567
2004	12,201.6	7,728.1	0.647

(Source: Canola Council of Canada Canadian Canola Industry.)

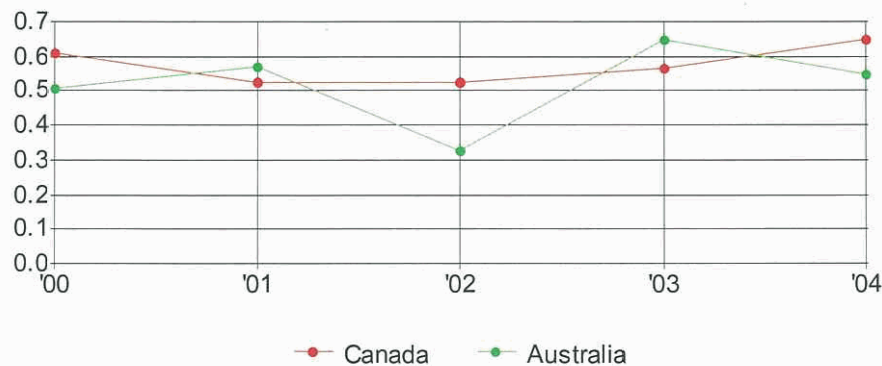
Table 2: - Australian Canola Production (GM Free)

Year	Acres (000)	Tonnes (000)	Yield t/acre
2000	3,294	1,680	0.51
2001	2,791	1,608	0.57
2002	2,400	790	0.33
2003	2,482	1,622	0.65
2004	2,764	1,531	0.55

(Source: Australian Oilseeds Federation Area and Production Canola.)

- While it is more common in Australian for yields to be adversely impacted by seasonal variation such as drought eg. 2002, or a late start to the season (snow provides a moist start in Canada), there is not a significant variation in yields between the two countries. See *Figure 1*, created with data taken from *Tables 1 & 2*.

Figure 1: Yield Comparison tonne/acre



- The Biotech Companies want a clear pathway to market and the lifting of the moratorium without the disclosure of the above.
- Pressure from 'Industry' to accept this demand.
- There is no requirement for stakeholders to declare any vested interest in GM technology.
 - i. These 'stakeholders' include:- CSIRO, Agrifood Awareness, Insitute of Public Affairs, Graincorp, Oilseeds Federation & Crop Life Australia. In NSW, private agronomists' legal advice is not to comment on GM crops and DPI officers are precluded from making statements or offering information. Therefore growers must rely on organisations for information. These organisations are predominately the source of information for growers and due to their financial interest in the technology; the information is subjective and carefully filtered. One of the most referred to, and used organization is, Agrifood Awareness, a joint organisation of GRDC, Crops Life Australia and the NFF. There is no disclosure of funding. The misinformation to farmers on this website is considerable e.g. *"Canadian canola farmers are reaping the rewards from GM canola. Australian growers should be able to have the choice to explore that opportunity..... Mr McLaren told the audience that under a project originally funded by Single Vision Grains Australia, the supply chain's protocols and processes, the technical principles and practices, and the requirements of the marketplace, were scoped and evaluated"*.
 - ii. The push to lift the moratoria in all States is predominately coming from those with a commercial interest in the uptake of the GM technology. They are well funded and encouraged by both State and Federal Governments who wish to with draw public funding for research and development. It needs to be recognised that private funding into research and development has expected financial outcomes. These outcomes are not necessarily for the common good.
 - iii. If the GM industry is given a favoured decision and allowed a pathway to market without any previous disclosure, then it will not necessarily be in the best interests of other non-GM seed growers to enter National Variety Trials, nor will they be encouraged to demonstrate their claims either. The flow on effect will be that growers will lose stability and integrity in the seed industry.

1. b) SOLUTION

- All food crops, both GM and non GM with the potential to commercialise, must undergo independent trials to demonstrate agronomic claims. These trials must be done side by side with conventional, TT and Clearfield canola for comparative results. There may be a need to re-evaluate the National Variety Trials in order that all varieties, GM and non GM can be incorporated. There must be a demonstrated net grower benefit.
- These trials must be undertaken in 2008 and 2009 and results published.
- A pathway to market is not in the best interest of growers considering the points given in this submission, unless there is a clear understanding by the GM industry that they accept and compensate growers for any contamination.
- All persons, organisations and companies which have a financial interest in GM technology to declare their interest. This is not to say they may not have a contribution, however, their financial interest needs to be recognised and put in perspective.
- Pressure both State and Federal Governments to re-invest into research and development especially CSIRO and State Departments of Primary Industries.

2. a) PROBLEM: - no costs available

- Higher input costs will mean a reduced profit margin for canola growers. “However, the cost of using GM canola is high, and I would like to see the biotech companies share some of the seasonal risks with growers.....The comparative example between Roundup Ready and conventional canola showed an increase cost for Roundup Ready of \$27.82p/h.”
- No cost analysis on segregation or identity preservation.
- Canadian farmers receive subsidies and Australian farmers do not. If the technology is as good as claimed these subsidies would be lifted in Canada. In 2004, the Net Farm Income figures released by Statistics Canada, government programme payments amounted to a record \$4.9 billion, but this was insufficient to counter economic problems. “*But even when this unprecedented injection of funds is added to the total, realized net farm income amounted to only \$2.1 billion. It clearly shows that the marketplace is not working in the interests of farmers.....Farmers are producing more, and selling more, but the revenue is simply passing through their hands into the pockets of large corporations*” (Wells, Canadian National Farmers Union).
“*In March 2005, the Canadian grain and oilseed sector organised protest marches in Canada to protest against rising costs and lower commodity prices. Rallies attracted up to 7,000 farmers in Ontario*”. (Ontario Farmers Press Release).

2. b) SOLUTION

- Cost of technology user agreements, GM seeds and matching chemicals to be revealed. i.e. all costs associated with GM canola growing.
- Study into the costs of segregation and identity preservation.
- State and Federal Governments offer subsidies to canola growers.
- If State and Federal Governments chose to lift the moratorium, they need to understand that Australia will be the only country which recognises GM patents and whose growers will not be subsidised. It will be necessary for the viability of farmers that State and Federal Governments offer subsidies to compensate for higher input costs and lost markets.

3.a) PROBLEM:- No published co-existence plans resulting in lack of choice

- No suitable on ground accurate test to detect the 0.9%GM content to comply with non-GM.
- No demonstration of segregation protocols or evidence that these are completed and accepted by the non GM industry.
- No acknowledgement that there will be GM contamination spread by grain harvesters, machinery used for sowing or cartage. Therefore no protocols for this section of the industry.
- No guarantee that GM canola can be successfully segregated to take advantage of the world's preference for GM free canola.
- Growers will be denied a choice due to inevitable seed contamination.
- There is no information on how much GM canola seed is ready for commercial release. The number of hectares planted and location will determine how widespread GM canola will be in Australia if the moratoria are lifted in 2008.
- If growers are denied a choice, it will follow through that consumers will also be denied a choice. This matter of choice was a promise of the Federal and State Governments who consistently say that we can choose.
- There is no information on whether the processing industry has any intention, or is able to offer a choice to consumers.
- The seed industry is currently reluctant to provide any documentation to support the current accepted non-GM level of 0.5%. This alone means that growers cannot guarantee their gm or non-gm status. Consequently the organic industry and the dairy industry have reported that they are unable to use canola meal as no one will guarantee its non-GM status. An example of this is David and Mary Booth of Buronga Organics, Cootamundra who can no longer source non-GM canola meal as feed for their organic livestock. David and Mary's telephone number is:- 02-6942 2115.
- A national public data base should be established to show the location of all GM canola crops to underscore segregation by minimising contamination by gene flow (e.g. pollen) and by grain harvesters (e.g. seed left in machines).

3. b) SOLUTION

- The fast tracking for the development of a suitable on ground and delivery point accurate test to detect GM levels. In the future, no GM crops should be given a licence until this test is available.
- Protocols for segregation published, easily accessible and agreed to by non GM industry.
- Protocols for sowing, cartage and harvesting published, easily accessible and agreed to be non GM industry, grain harvesters and all others involved in the supply chain.
- Identify how much GM canola seed is ready for commercial release and the location of likely GM plantings.
- Request the processing industry i.e. crushers, millers etc identify difficulties and costs associated with providing a separate supply chain and their capacity to do so.
- Ensure that the seed industry test and supply labels on their certified seed to ensure compliance that their non GM canola is less than 0.5%.

4.a PROBLEM: – Loss of markets and premiums

- Australia's canola is sought worldwide as it is still GM free.
Canola boom prices for lucky '06 growers by Mark Martin. *"With the European rapeseed harvest nearly completed actual yields have been surprising traders as they were much lower than expected.....If the EU does have to import this year, its strict guidelines on non-genetically modified imports would put Australia at the top of the list as it was last year. This resulted in the bases component of our prices reaching unprecedented levels, delivering high prices to growers fortunate enough to grow a crop last year."* (The Land August 7, 2007).

"Despite the recent World Trade Organisation Panel ruling on the approval and marketing of biotech products in the EU, it could be some time before genetically modified canola is welcome in the EU, according to the Canola Council of Canada.....If not for the GM restrictions, the Council estimated that between 0.3 and 0.4 M.t of Canadian canola could have been exported to the EU in 2005-2006." (Canadian Agriculture and Agri-Food).

- Australia produces 4% of the world's canola and has a 13% share of the world's export market. Australia must compete with countries producing far greater quantities which can guarantee supply which Australia cannot do due to unpredictable weather.
- As one of the world's largest exporter is Canada, which has considerable carry over stocks. *"For 2006-2007, world production of rapeseed/canola is forecast to decrease slightly from 2005-2006, resulting from lower output from Canada and China. In Canada, lower production was partly offset by high carry-in stocks for 2006-2007 resulting in high supply for the second consecutive year". "Canola exports are expected to rise slightly from 2005-6 to a record 5.6M/t because of lower competition from Australia."* (Canadian Agriculture and Agri-Food).

- Australia must therefore produce a canola which is in demand worldwide to differentiate ourselves from direct competition with Canada. *“Canola exports are expected to rise slightly from 2005-2006 to a record 5.6M.t because of lower competition from Australia”*, (Canadian Agriculture and Agri-Food).
- No country in the world prefers GM canola over non-GM and there is no demonstration of premiums for GM canola.
- Loss of premiums for non GM canola. Agriculture and Food Minister Kim Chance today said *“Western Australia’s canola growers were receiving premium prices for their crops, due to the State’s commitment to the GM moratorium.”* Mr Chance said *“Australian canola prices had now exceeded the prices for Canadian GM canola, where previously Canadian prices consistently exceeded Australian prices. In 1998, the difference between Australian and Canadian canola prices was about A\$70 a tonne in favour of Canada,”* he said. *“However, by May 2006 Australian prices had exceeded Canadian prices by some A\$50 a tonne.”* (Kim Chance Media Statement WA).
- There should not be any adverse financial impact on non-GM growers by the GM industry.

4. b SOLUTION

- Ensure that growers who wish to remain GM free can do so by addressing co-existence and guaranteeing a supply chain for non-GM grains.
- Any loss of market access, premiums or non GM status through unintentional presence of GM material is compensated for by the GM industry.

5.a PROBLEM:- Jeopardising wheat sales.

- In relation to GM canola, the AWB Group has expressed some concerns about the impact the commercial release of GM canola varieties will have on the marketing of Australian grains, particularly wheat. With approximately one-third of the AWB National Pool’s customers, Australia’s non-GM grain status is a distinct marketing advantage. Therefore before GM canola can be released commercially in Australia, the AWB National Pool requires a supply chain system that can achieve segregation of GM and non-GM grains and guarantee product integrity.

5. b SOLUTION

- Obtain, in writing, from the wheat industry, and any other grains which use the supply chain, their current position on market acceptance of levels of adventitious presence of GM canola in the currently accepted admix of 2%.(non-GM).

WHEAT

6. a **PROBLEM:- markets**

- At present there is a clear market signal from international and domestic customers that strong reservations exist concerning GM wheat. None of AWB's National Pool customers are prepared at present to purchase GM wheat. Based on AWB Group's experience in managing the National Pool we believe there is currently insufficient capability within the supply chain to ensure complete segregation of GM and non-GM grains. Due to this lack of capability, the introduction of GM wheat in Australia could jeopardise many of our existing export markets. AWB believes that GM wheat should not be released commercially in Australia until market preferences change and/or supply chain technologies and protocols are developed that will ensure that customer requirements can be met. There is well documented worldwide resistance to GM wheat.
- "The international customers that buy 82% of Canada's wheat crop say that they will stop buying if Canada introduces GM wheat. These customers have been clear—they will stop buying all wheat from us—GM and non-GM alike. *This market loss issue applies to all GM wheat, not just RR wheat.*"
- Currently Australia is the only country developing GM wheat which is being trialed in Victoria by the Victorian DPI. This wheat is genetically engineered to be drought tolerant. This GM development is an example of the research and development dilemma Australia currently faces which is driven by the notion of a return on investment for the breeders, with little regard to what growers need or want.

6. b **SOLUTION**

- No further development for GM wheat until there is a clear call from growers and a very clear indication from markets that GM wheat is tradeable.
- Promote the existing successful development of conventionally bred drought tolerant wheat.

References

- *'R&D Outcomes must be measured and there for all to see.'*, Ground Cover May-June 2007, Editorial Opinion by Peter Reading, Managing Director GRDC.
- *'Broadening his Experience'*, Ground Cover Nov-Dec 2006., Andrew Broad, Nuffield Scholar.
- *'Oilseeds Federation Area and Production Canola'*, Oilseeds Federation Australia, http://www.australianoilseeds.com/info/industry_facts_and_figures
- *'Canadian Canola Industry'*, Canola Council of Canada, Market statistics, <http://www.canola-council.org/acreageyields.html>
- *AgriFood Awareness* 07/08/2007, <http://www.afa.com.au>
- *'Canola: situation and outlook'* Canadian Agriculture and Agri-Food, <http://www.agr.gc.ca>
- *'Major Exporters of Canola – Canada.'*, Canadian Agriculture and Agri-Food, <http://www.agr.gc.ca>
- *'Biodiesel Demand'*, Canadian Agriculture and Agri-Food Canola, <http://www.agr.gc.ca>
- *Canadian National Farmers Union*, 'A Report by the National Farmers Union to the House of Commons Standing Committee on Agriculture and Agri-Food Genetically modified wheat.', www.nfu.ca.
- *Saskatoon Press release*, Canadian National Farmers Union, www.nfu.ca.
- *Ontario Farmers Press Release*, <http://www.ontariofarmer.com/yesterday/wednesday/default.html>
- *'Canola Boom Prices for lucky '06 growers'*, The Land, August 7th 2007.
- *'WA Canola Farmers reaping benefits of GM Moratorium'*, Kim Chance 29/8/06. Government of W.A. Media Statements. <http://www.mediastatements.wa.gov.au> .

ADDRESS TO THE PRIMARY INDUSTRIES MINISTERIAL COUNCIL AND PANEL
Melbourne

By

Juliet McFarlane

Network of Concerned Farmers

31st August 2007

As I sat down to write this speech the other day, it occurred to me that I was writing this same speech, asking the same questions 10 years ago as nothing really has changed at all. At that time I was writing a submission to the Federal Government regarding the introduction of the Legislation and as a grain grower, I could see even then that there were concerns about the introduction of this technology. As a daughter of a politician and having been brought up to believe in the democratic process in Australia, I had complete confidence in our democratic system of a fair go.

We have always been promised, by the Federal Government, that any decision would be based on science, that we would be given a choice, and that it would be a transparent and democratic decision. Now some years down the track, none of these promises have been kept.

There is no science behind the push to adopt GM canola, there will not be a choice for growers or consumers, there is practically no transparency and to date, democracy has been pretty much cast aside, although I acknowledge that my presence here today means that there is a vestige left.

To expand on these issues, let me start with the **science**. In this instance we are talking agronomic science such as input costs, gross margins, yields and herbicide regimes. I don't imagine any of you people sitting here take on jobs, or buy new products without asking these most fundamental questions, yet the proponents think that farmers don't need to know this basic information and I wonder how they think we can budget for the unknown. Like all good farmers we are encouraged by our agronomists and the GRDC to 'know your product, do your sums, look at your markets and be judicious about new technologies'. Yet here we are 10 years on, still no science and on the brink of an irreversible decision.

As the biotech companies insist on a pathway to market, without any demonstration and threaten to abandon Australia, the promise of science seems to have been forgotten in favour of private investment. Currently there are many ways, growers and agronomists alike, can find out information on costs, herbicide use and performance of newly developed varieties. Most are entered in the national Variety Trials the year before commercial release. If the GM industry is given a favoured decision, then it will not necessarily be in the best interests of other non-GM seed growers to enter National Variety Trials, nor will they be encouraged to demonstrate their claims either. The flow on effect will be that growers will lose stability and integrity in the seed industry.

We are told that there will be an increase in yield but the GM varieties currently offered only have GM herbicide tolerance and or utilise a hybrid trait. These GM traits in themselves offer nothing else as increases in yield comes from conventional breeding. This genetic modification does not confer increases in yield, higher oil content, drought resistance or any other benefit claimed.

Please note that Canada after 11 years of GM canola has almost the same yields as Australia in raw yearly data. The Oilseeds Fed of Aust has a graph showing Australian yields to be well below that of Canada, but they use a five year averaging system so the droughts in Australia bring our overall average down. If one discounts the droughts the average yields are actually slightly above Canada. This is a typical example of selective use of data by Institutions with a commercial interest and it is extremely misleading.

Both Monsanto and Bayer claim higher yields, but neither is willing to enter into any independent trials despite the offer from WA Ag Minister Kim Chance. Very surprisingly the Chairman of WA farmers, Trevor de Langraff, just like GRDC, concludes even though GMs are no better than conventional varieties it's perfectly acceptable not to trial them as it would be unfair.

Bayer's InVigor canola uses GM hybridisation technique but the yield is the same as conventional hybrid yields. The Glufosinate used in Bayer's InVigor canola will not be considered by growers as it has virtually no use in Australia. It only suppresses two of our major weeds in canola-pattersons curse and rye grass. Monsanto's RR canola is seen as a way of dealing with our most common weed, wild radish. But no trials have ever been conducted where brassicas grow, so we have no idea if it will be effective or not on this and other brassicaceous weeds. TT is the proven solution here and about 50% of Australian canola is TT. Even with an expected 15% yield penalty, our national average yields are, as I said, similar to the predominately GM Canadian canola and they don't grow TT.

There is also the claim of reduced herbicide use, however, Monsanto has failed to tell us that RR roundup (which the contracts say we must use) is much stronger than normal roundup and that we will be using four times the normal use of glyphosate in one year. This will have a twofold effect, one to reduce the life of glyphosate and the other will impact on the environment as more toxic chemicals i.e. 2-4,D are used to clean up pre sowing paddocks.

There is also the claim of improved and new qualities in canola oil, meal and that GMs are necessary for the development of biodiesel. You will note that this claim is always preceded by the word potential. Canadian canola council reports show that more than 90% of development of new traits is into production traits with patents e.g. herbicide tolerance and insect resistance, very little development dollars are actually being spent on quality traits.

The next promise was, and still is that of **choice**. But there are two components to this, farmer's choice and consumer's choice. As I have said, farmers are given unscientific selective and misleading information so the farmer's choice is immediately compromised and growers are incapable of making a sound choice on the given information.

Generally speaking the proponents of the technology are saying it will increase yields, it will be better for the environment, it will have greater oil content, that it will be more drought tolerant, that Canadian farmers are reaping benefits, that co-existence plans are in place and we all agree with them and we can all now choose. So farmers, given this information are eager to embrace a technology having been told that if they don't want it, they won't have to grow it.

The second aspect of choice is consumers. It is noted that protocols have been or are being prepared for supply chain segregation, however these protocols fall short in two

major areas. Firstly there is currently no robust, validated quick qualitative and quantitative test for GM content in grain. Identity Preservation will depend on a Statutory Declaration which is unprecedented as currently all other grains are tested at delivery by the handling agent and growers are paid accordingly. Secondly, all the protocols have been prepared by the GM industry and Institutions which support the introduction of GMs and are publicly in favour of the lifting of the moratoria. Non-Gm growers have to date, had no role in the preparations of these protocols, or even been asked to comment either before or after their publication.

It was the GM industry which set up committees to formulate protocols without any pretence of grower equity. Consequently we have segregation and identity preservation protocols which we canola growers have had no input into. We don't even know in fact which protocols are being used, are they the original ones made by the GTGC, are they made by Single Vision or are they the ones currently being prepared by DAFF? As I have only seen the GTGC protocols I shall assume that the new ones differ very little, and make the following observations.

That it will be up to the non GM farmers to provide the buffer zones, pay for clean downs, all segregation costs and accept all the liabilities. Whilst the minority GM farmers take over the entire current identity preservation and segregation system, with complete impunity. Hardly a fair go I think

The canola seed industry has shown that it is unprepared, unwilling or incapable of segregating sowing seed. In 2005, canola grower Geoffrey Carracher thought he was buying GM free seed from Dovuro, which upon laboratory testing revealed a 0.5% level of contamination. Our own experience is, that Dovuro who we bought seed from last year, flatly refused our request for a GM test. Because of this complete lack of willingness to comply with the PIMC 0.5% GM content, farmers don't actually know the GM content of the certified seed they are purchasing.

Why is it that organic stock producers are not permitted to use canola meal as no-one will verify its GM status? How is it that there is a rule for growers to compel us to sign a legally binding document which we can only guess at, and no enforcement for the seed industry to provide us with tested seed verifying that it is under 0.5%? Why is there one rule for the seed industry which does not have to make any declaration? And another rule for growers who will be forced to make a declaration based on a complete unknown, and who will be forced to accept any liabilities and market loss as a consequence of this guessed declaration.

The promise of choice by Federal Minister McGauran and the uncertain protocols assume that segregation will happen. There is no legislative requirement for the supply chain to offer segregation and it is quite feasible, that Graincorp being the bulk handler in the east, would consider it in their interest to allow segregation to fail due to their commercial arrangements with Nufarm, through Nugrain, who have recently purchased Monsanto's RR canola. Or the supply chain could well argue is too costly. The end result is that the promise of choice for the consumer may not even happen. Minister McGauran said after a new report released on the 24th August by SGA solutions that *'Genetically modified (GM) crops can be safely grown and marketed alongside conventional crops in Australia'* The report is compromised because the author did not reveal his past relationship with Monsanto, just as the report from Acil Tasman is also compromised. It is a misleading statement as the co-existence plans are a pathway to market for the GM

industry, but they are not a pathway to market for the non-GM industry. Added to which we don't know the cost of segregation, but we do know that according to the protocols and ABARE, that non GM growers will be expected to subsidise the GM industry by bearing all the costs of segregation.

Australia's canola industry is constantly being compared with that of Canada whose growers are, Minister McGauran says "reaping the benefits of GM technology". But, he does not tell us that Canadian growers are subsidised and that their terms of trade has deteriorated in recent years.

We are not told that Canada has considerable carry over stocks. (Canadian Agriculture and Agri-Food). Website. *"In Canada, lower production was partly offset by high carry-in stocks for 2006-2007 resulting in high supply for the second consecutive year". "Canola exports are expected to rise slightly from 2005-6 to a record 5.6M/t because of lower competition from Australia."* They are not told that our canola is sought after, (The Land August 7, 2007.....*If the EU does have to import this year, its strict guidelines on non-genetically modified imports would put Australia at the top of the list as it was last year. This resulted in the bases component of our prices reaching unprecedented levels, delivering high prices to growers fortunate enough to grow a crop last year.*"). We are not told that as Australia has a 13% share of the world's export market, that we must compete with countries producing far greater quantities which can guarantee supply. We can never guarantee supply due to our periodic droughts which means carefully nurtured markets can be lost overnight to competitors. The only way to regain these markets is by providing something no one else can, and right now that is non-GM. No country in the world has a preference for GM food or is willing to pay a premium.

We should also think very seriously about the future of our cropping industry when we talk about choice. GRDC Managing Director Peter Reading said in the May-June Groundcover *"One thing we do know is that productivity growth in Australian agriculture has been strong relative to other sectors of the Australian economy (up to four times higher), and also when compared to other countries' agricultural sector."* Yet this is not what we growers are hearing from agricultural leaders pushing for the adoption of GM food crops. We are hearing that we are uncompetitive and we will get left behind.

If all our crops become GM crops, it will be too expensive for breeders to invest in R & D. Money set aside for research will have to pay for expensive patents before any research is begun. It will make research too expensive, biodiversity will reduce and independent seed companies will fail as they will not have the current free access to other germplasm or foundation seed as it will all be patented. This is already happening in the world of medicine with so many identified traits patented, and it has been a huge contributor in stifling precious research.

There has been an enormous amount of research into genomics in recent years, yet we hardly hear about its success And it is this technology which is actually serving growers and community needs. We need all relevant information on new technologies, not just the ones which are money earners in order to make sound choices.

The word **transparency** has become to mean, for me, watch out for hidden agendas and financial interest. In NSW, private agronomists' legal and insurance advice is not to

comment on GM crops and DPI officers are precluded from giving advice on GM crops. Therefore growers must rely on organisations for information regarding GM canola and other GM grains. The majority of these rural industry organisations purport to be independent although they are very selective and information is carefully filtered. These organisations include:- CSIRO, Agrifood Awareness, Institute of Public Affairs, Graincorp, Oilseeds Federation, VFF, Acil Tasman, SGA Solutions & Crop Life Australia. These stakeholders all have a commercial interest in the uptake of the technology, although they rarely acknowledge it, they have enormous influence and the misinformation to farmers on their websites is considerable. The push to lift the moratoria in all States is predominately coming from them. They are well funded and encouraged by the Federal Government who wishes to withdraw public funding for research and development. It needs to be recognised that private funding into research and development has expected financial outcomes and that these outcomes are not necessarily for the common good, and growers are barely acknowledged as stakeholders. The USDA has identified the seed industry and the biotechnology companies as by far the greatest beneficiaries from the uptake of GM technology and this is where the real push to adopt GMs is coming from. All persons, organisations and companies which have a financial interest in GM technology need to declare their interest. This is not to say they may not have a contribution, however, their financial interest in this debate needs to be recognised and put in perspective.

. I wonder how many other canola growers are in the room today. I say canola, as this is the first GM food crop to be granted a Federal commercial Licence and the first Gm food crop which will be commercialised if the moratoria are lifted. How is it that when canola growers like me got together and started asking questions we were labelled, and still are labelled anti-GM.? What has happened in this country when to ask questions means you are anti? Why is it that we canola growers have to fight so hard to have our ten year old questions answered, that we are dismissed, often rudely, as luddites or some other derogatory word. Yet the proponents of GMs are given every opportunity to express their opinion, are well funded and treated by, particularly the Fed. Nationals with great favour and even commissioned to do reports without declare any conflict of interest.

If the decision reached by the Ministers is to lift the moratoria next year, I would respectfully ask that there is an acknowledgement of impacts:

1. Negative financial impact this is likely to have on producers i.e. cost of technology, cost of segregation and identity preservation.
2. The removal of choice for both growers and consumers.
3. The hastening of resistance to glyphosate.
4. Loss of market access and premiums.
5. Eventual loss of biodiversity and non GM seed with new traits.

If the Minister maintains the moratoria, I would again respectfully request that this time these issues are addressed with specific time frames.

1. All GM food crops to be scientifically, independently trialled and assessed. All data to be published. This would be a good opportunity to have a fair national consistent evaluation scheme for all new releases GM and non-GM e.g. ACAS
2. All growers should have:-
 - a. free access to published protocols for co-existence
 - b. Provision to have input into the process and review
 - c. Majority agree to co-existence protocols
 - d. Majority to have a vote in the decision of whether the current bulk handling system of non-gm should accept GM until there is a clear acceptance that the majority wish to take up the technology.
3. Mandatory disclosure of vested interest in GM technology in any industry debate or discussion.
4. A qualitative and quantitative robust test to be developed for use by growers before delivery of grains to detect levels of 0.9% and above before any commercial release of the GM food crop in question.
5. All new seed to be labelled with GM content (under 0.5%). Testing to support the label must be an approved identifiable testing procedure.
6. Mandatory disclosure of geographical location of all GM crops.
7. Biotech Companies to state, in writing, at what level of contamination would they impose royalties.
8. New traits and varieties, funded by public institutions e.g. GRDC, to always be available as non GM.

In conclusion, I recognise the enormous role agriculture has played in the development of Australia as a nation. Agriculture still employs 17% of the workforce; we provide our most basic need which is food and our contribution to export earnings are not to be scoffed at. I was raised on William Farrer's farm, and in that context I am acutely aware of the importance independent breeders and scientists have had in shaping the future of our grains industry and how important it is to recognise and nurture these people for our children's future. If the biotech companies want to be part of this future, where everyone shares in agricultural wealth, then we can and should move forward to form a symbiotic relationship. Rather than the current grab for dominance and financial gain whilst imposing unmanageable risks on the farming community.

I will finish by quoting Peter Reading "*it is not enough for research to be done, it has to be seen to be done; and the results available for all to see in a financially, socially and environmentally healthy industry.*"

WHAT THE INTRODUCTION OF GM CANOLA WILL MEAN FOR RURAL COMMUNITIES

(refer principle: *practical measures that are flexible and cost effective*)

VARIETIES	PRE-GM		POST-GM			
	Conventional	TT Varieties	Conventional	TT Varieties	Roundup Ready GM	INVIGOR-GM
Seed Costs	\$15	\$17	\$15	\$14	?	\$63
TUA					\$37	
Segregation & Identity Preservation			\$52	\$52	\$52	\$52
Testing			\$10	\$10	\$10	\$10
TOTALS /ha	\$15	\$17	\$77	\$76	\$99	\$125

